

Fiscal Year 2014 Preliminary Operating Appropriations Request
UM

Summary

The University's FY2014 State Appropriations Request for Operations is being presented to the Board by management as an information item at the June meeting and for approval at the July meeting. Two themes will be used in the submission: Minimum Funding for Core Operations, Advancing Missouri Competitiveness including Increasing STEM (Science, Technology, Engineering, and Mathematics) Education and Research Capacity and Caring for Missourians Phase 2. Additional strategic initiatives were identified but not included in this request. These will be candidates for funding if the cigarette tax initiative passes and are detailed in the attached board paper after the description of the operating appropriation request. Following is a high level summary of the request, which will be prepared according to state guidelines upon Board approval. The operating appropriation request consists of:

FY2014 State Appropriations Request for Operations
UM

The University's FY2014 appropriation request for operations is centered on two strategic themes. Minimum Funding for Core Operations is our number one priority and required to execute our mission. In addition to the minimum funding requirement, the University's appropriations request for Operations focuses on new investments which when combined with the core, will advance Missouri's competitiveness, as well as better position the University to contribute to the future economy of Missouri and the welfare of its citizens. These investments support the University's strategic goal of maintaining its position as one of the top public research universities in the country. These new initiatives would increase research capacity and the number of college graduates qualified to meet workforce needs in science, technology, engineering and mathematics and in healthcare.

- **Minimum Funding for Core Operations: State Request - \$417.9 million**

The University's first priority for the FY2014 appropriation request is to maintain its base level of support and to protect the purchasing power of that support. This along with the University's continuous commitment to containing costs and strategic reallocation is necessary to ensure that we can carry out our mission of teaching, research, public service, and economic development. This theme is made up of five components described in detail below.

- **FY2013 Operating Appropriations Base: Core \$398.0 million**

The University's first priority in the FY2014 request for operations is the funding of its FY2013 core state appropriation. Operating state appropriations are in the University's Operations Fund. The University's Operations Fund Budget is \$1.1 billion out of a total \$2.7 billion all funds budget. The Operations Fund supports the core teaching and service missions of the University as well as the administrative operations for research and economic development. The gross FY2013 appropriation of \$398.0 million, contributes 35% of the operating fund budget as shown in Figure 1 below.

- **UMKC/MSU Pharmacy Funding: Core \$2.0 million**

This funding is for a satellite Doctor of Pharmacy Program. UMKC first received this appropriation in FY2012 to develop a Doctor of Pharmacy program at Missouri State University. After supporting infrastructure needs, the sustaining appropriation will support personnel and distance education costs for the program and is mandatory for the program to move forward. After accreditation, the first class will enroll in Fall 2014.

- **Missouri Federal & State Technology Partnership Program (MOFAST): Core \$340,000**

Due to legislative changes to the house bill location of this appropriation, this is a new core item for our request. This partnership between University of Missouri and Department of Economic Development funds counselors located in Columbia, St. Louis, Kansas City and Rolla/Springfield who provide counseling to startup businesses and small Missouri technology businesses in order to bring government research and development awards to Missouri small businesses. Every state dollar is matched with \$2 of federal and local match. This program will foster technology entrepreneurship to grow Missouri industries of tomorrow.

- **Core Operating Support: Total need identified \$39.2 million: State Request - \$15.7 million**

In order to support the on-going operations of the University and execute our mission, core support must be partially protected from the effects of inflation. This request for the state funds is calculated based on revised strategic financial planning assumptions, estimated inflation, and our best information. The state request portion of the increase in Core Operating Support was calculated as 40% of the total identified need. This is the approximate percentage of state support in our FY2012 operations budget sources and well below historic funding levels. The remaining 60%, or \$23.5 million, will be funded through efficiencies, strategic reallocation, and increases in other revenues.

Table 2. Summary of Increase to Core Operating Support.		
Table 2. Summary of Increase to Core Operating Support.	Total Need	State Request
Salary & Wage 3% Merit Increase	\$20.8	\$8.3
Benefit increase for health care and retirement	\$ 5.9	\$2.4
Benefit increase related to salary increase	\$ 6.1	\$2.5
Other Expense and Equipment	\$ 6.4	\$2.5
Total Increase to Core Operating Support	\$39.2	\$15.7

The Other Expense and Equipment request is an estimated inflationary increase needed to fund increased costs associated with technology, infrastructure, and other on-going costs, professional development of faculty and staff, and unfunded mandates and compliance.

- **St. Louis Equity Adjustment: State Request - \$1.9 million**

According to a 2002 Coordinating Board for Higher Education study that evaluated FTE funding relative to the mean and median of the appropriate Carnegie classification peer group for each higher education institution concluded that the University of Missouri-St. Louis (UMSL) had a significant funding gap of \$10.8 million in state appropriations. In the last few years, much of this identified need has been addressed by reallocations from System administration to UMSL and new targeted funding from the state. The FY2014 item would request the remaining amount of \$1.9 million to reach the target of \$10.8 million.

This investment in UMSL provides the funds needed to correct the equity funding gap in state appropriations. This investment in the land-grant research institution committed to meeting the diverse needs in the state's largest metropolitan community will provide for continued educational, research and outreach programs benefiting all citizens of Missouri.

- **Advancing Missouri Competitiveness: State Request - \$65.5**

The University of Missouri as the state's land grant research University plays a critical role in supporting the state's economic growth and development and its national and international competitiveness. Economic studies indicate that a state's future prosperity will rest on the extent to which its citizens have access to quality health care, its graduates are educated in the STEM disciplines, and research and innovation in STEM and healthcare disciplines are fostered. Key findings in the 2010 Missouri Gateway-Skills Report include a 11.1% increase in science-intensive jobs, a 4% increase in technology-intensive jobs, a 4.2% increase in engineering intensive jobs and a 3.2% increase in mathematics intensive jobs by 2018. According to the Missouri Department of Economic Development, currently the Top 10 current job openings and the Top 10 job growth between 2008 and 2018 are all in STEM and Health Professions occupations requiring bachelors or higher degree completion. The Advancing Missouri's Competitiveness has two foci: one on the STEM disciplines and one on health care as described below.

- **Increasing Science, Technology, Engineering & Mathematics (STEM) Teaching & Research Capacity: State request - \$55.2 million**

For the Missouri economy to grow and flourish in the future, the state must have a technologically competent workforce and robust research and development activity. A recent Department of Commerce report says in the last 10 years the number of STEM jobs has increased three times as fast as those in other fields and this growth is expected to continue in the coming decade. Missouri will demand a total of 133,170 STEM jobs by 2018, up from 119,920 in 2008 and 92% of these jobs will require postsecondary education and training. Of the projected 133,170 jobs, 63% will require bachelors or higher degree attainment. The University of Missouri has a responsibility to the state for producing educated graduates to meet the workforce needs. This involves attracting, educating, and graduating students in science, technology, engineering, and math fields. To be successful in this regard, the best teachers must be recruited and retained in Missouri's high schools and at the University. In addition, to grow the University's contributions to research and development activity, the University must remain on the cutting edge of research by recruiting faculty who will drive new discoveries and innovations. The STEM focus of the second theme, Advancing Missouri Competitiveness is composed of four initiatives to help us achieve this objective.

- **Meeting the State's Workforce Needs in Science, Technology, Engineering, and Mathematics: State Request - \$20.2 million**

This request will provide funds for STEM faculty who are focused on student success; provide career enhancement for elementary and secondary teachers in math, science and engineering; support retention efforts for students in STEM disciplines; provide need-based scholarships and work-study funding for students in math, science and engineering and stipends for undergraduate research; provide stipends to STEM education students during the semester of student teaching, and loan forgiveness and stipends as incentives for STEM graduates to teach in elementary and secondary institutions; and support experiential youth programs focused on math, science and engineering. Table 3 shows three of our four campuses are behind peers on STEM degrees awarded.

This request for state funds includes:

- \$5.0 million to hire 50 STEM faculty who are focused on student success.
- \$9.68 million for retention efforts including month-long summer program to jumpstart success for 400 incoming freshmen, need-based grants for 800 students, work-study funds to help meet the needs of 800 low-income students, and stipends for 400 freshmen and sophomores to engage in undergraduate research. Also includes funds to run a center that consolidates services that enhance student success and salary for personnel to direct retention efforts.
- \$3.0 million for workshops and stipends for 200 elementary and 400 secondary teachers to help them develop innovative and engaging ways to teach in STEM areas.
- \$1.9 million to provide stipends for 200 STEM education students during their semester of student teaching, and for loan forgiveness and stipends as incentives to attract and retain 500 STEM graduates as teachers in elementary and secondary institutions.
- \$628,000 for experiential youth programs including summer camps for 160 6th-9th graders, and summer camps and weekend events for 600 10th – 12th graders.

- **Science & Engineering Equipment: State Request - \$2.0 million**

Acquisition of cutting edge science, engineering, and technology based equipment is needed to update the University's science and engineering laboratories and to support the education of students enrolled in STEM disciplines. While legislation passed in 1985 recognizes the importance of special equipment in the training of engineers and invites the University to request special appropriations based on the number of undergraduate engineer degrees awarded, the University has not received an appropriation for engineering equipment since 2002. The need for updated equipment in STEM disciplines is ongoing and requires recurring funding. This is such a critical need we are requesting a \$2.0 million recurring appropriation.

- **Sustain STEM Enrollment Growth: State Request - \$16.6 million**

From Fall 2000 to Fall 2011, enrollment in the STEM disciplines accounts for 52% of the enrollment growth at the University. As a result, class sizes and student advising responsibilities have increased to a point that educational quality and faculty research productivity in the STEM disciplines are at risk. This request for \$16.6 million would provide support for enrollment growth in STEM areas and is based on the DHE approved COPHE funding formula.

- **Improve STEM Infrastructure: Total need identified \$32.8 million, 1st year of 2 year request: State Request - \$16.4 million**

Protecting our infrastructure is a critical investment especially in STEM related facilities. The total need of the University in additional required investment to meet best practices is \$57.4 million. Of this amount 57 percent is related to facilities and infrastructure which directly support STEM disciplines. In order to educate the growing number of students enrolling in STEM disciplines, the classrooms and laboratories must be renovated to accommodate state of the art teaching. We are requesting the State provide funding of \$16.4 million, the first year of a two year request, to meet this critical need.

- **Caring for Missourians – Phase 2 - \$10.3 million**

Economic development and well-being in Missouri depends on a healthy workforce. In turn, a healthy workforce depends on access to quality care delivered by qualified health professionals. The request is targeted at addressing access to care by increasing the health care professions graduating from the University.

- **Caring for Missourians: Nursing, Dentistry, Optometry and Health Professions: State Request - \$10.3 million**

The State of Missouri has a growing shortage of health care professionals affecting the quality of care and access to care, and its higher education institutions have limited capacity for expanding educational opportunities. In FY2010, as part of the statewide Caring for Missourians program to address the shortage in educational capacity in this critically important area, the University received a one-time appropriation of \$24.3 million out of a total \$34 million appropriation to higher education for this purpose. These resources were used to expand program capacity in the University's health profession educational programs including medicine, pharmacy, dentistry, optometry, nursing, and health professions. As a result, 42 temporary seats were added for medical students; 44 temporary seats in pharmacy; 15 temporary seats in dentistry; 12 temporary seats in optometry; 132 temporary and 26 permanent in nursing; and 48 temporary and 22 permanent in health professions. It was not possible to add a greater number of permanent seats due to the non-recurring nature of the state support provided, and the lack of continuing support for the achieved permanent increases manufacturers additional financial stress on under-funded degree programs. Recurring funding will enable UM institutions to sustain and increase annual production of health care professionals by the following increments: physical therapists by 4; occupational therapists by 6; specialists in communication and disorders by 23; respiratory therapists by 4; ultrasonic technicians by 5; radiology technicians by 4; nurses by more than 60; dentists by 5; and optometrists by 4.

The amount of this request does not include the allocation distributed to the schools of medicine and pharmacy. Funding for increases in the production of physicians and pharmacists is requested separately.

Summary of FY2014 Operating Request

The total request is \$483.4 which includes minimum funds for core operations of \$417.9 million as well as \$65.5 million in new initiatives as previously described. The table below summarizes the request for operations. The state funding would be coupled with University resources including internal efficiencies and reallocation and modest increases in tuition and fees to meet the University's funding needs.

Other Strategic Operating Investment Needs

In addition to the items on the request above, management considered funding for several other items including translational research, increasing the number of physicians graduating, faculty and staff needs to reach academic and research parity due to enrollment growth, and increase in maintenance and repair funding for non-Stem academic facilities. These strategic priorities, described below, would be candidates for funding using the proceeds from the cigarette tax should that initiative be successful.

- **Protecting the University's Infrastructure Base M&R Component: Total need identified \$24.5 million, 1st year of 2 year request: State Request - \$12.3 million**

Investment in Plant has been below recommended funding levels resulting in rapidly growing deferred maintenance backlog. The University's capital funding needs are limiting enrollment growth and the competitiveness of its four campuses. The University is reaching a "tipping point" in its ability to keep current facilities functional. The University has been able to limit the growth of its backlog of facilities needing maintenance and repair to manageable levels with past state support and its own resources. However, the facilities improvement deferral rate is increasing, and the backlog is growing beyond the University's ability to manage it with current resources. As a result, the University is compelled to increasingly use resources to fix emergencies rather than invest in preventive maintenance and renovations that adapt older facilities to current

student needs.

This request is to increase state support to fund our shortfall in the required investment in facility maintenance, repair and adaptation based on Facilities Needs Condition Index (FCNI). Best management practice is to maintain FCNI of 0.30 or less. The University's FCNI is currently growing at 0.31 with projections to 0.40 by 2021. The University faces more than a \$1 billion backlog in key renovation and repair needs. Total need is \$94.2 million with University contribution expected of \$36.8 million and leaving the State need for \$57.4 million, of which approximately 43% is for infrastructure and non-STEM academic and research facilities. We are requesting the state to fund \$12.3 million of the request as a portion of our protecting the base. The other portion is included as part of the request for maintenance, repair, and adaptation needs related to Increasing STEM Education and Research Capacity in the FY2014 Operating Appropriations Request.

- **MU Medical School Partnerships (CoxHealth and Mercy): State Request - \$10.1 million**

- Studies increasingly point to a health care crisis related to physician shortages in Missouri and across the nation. Currently:
 - More than 90 percent of Missouri counties lack adequate access to health care professionals. In terms of primary care physicians alone, more than 370 of these physicians are required to address the state's current health care needs.
 - Missouri ranks among the top 20 states in terms of people age 65 and older who will require more medical care as they age.
 - While the number of elderly is expected to double by 2030, the number of physicians who care for patients with multiple chronic diseases is expected to decline.
 - A study from America's Health Rankings rated Missouri 39th among 50 states in overall health rankings in 2010. Primary care physicians play a crucial role in the diagnosis and treatment of chronic disease — a role critical to reducing Missouri's health care spending.

In response to the shortage of physicians in Missouri, the University of Missouri School of Medicine in Columbia and CoxHealth and Mercy health systems in Springfield plan to increase medical school enrollment at MU by creating a clinical campus in Springfield, Missouri. At the University of Missouri School of Medicine in Columbia and most other medical schools, students complete four years of education to receive a medical degree and become a physician. Students primarily spend the first two years learning foundational aspects of medicine in educational facilities — such as classrooms, labs, libraries and auditoriums — from a variety of biomedical scientists and physician educators. Students spend much of the final two years of medical school in patient-care facilities such as hospitals and clinics. This clinical component of medical student education involves directly interacting with patients under the supervision of physicians practicing in a variety of specialties, such as family and community medicine, internal medicine, pediatrics, surgery, neurology, psychiatry, obstetrics and gynecology.

Each of the past two years, MU received more than 1,500 applicants to medical school, but it only has the capacity to accept 96 new medical students annually. The clinical campus in Springfield would allow MU to accept 128 medical students annually, with 32 students from each class completing the second two years of their medical education in Springfield. The first expanded medical school class will be admitted 24 months after funding is secured.

The clinical campus would require an investment in additional medical school faculty members and facilities. A medical education building would need to be constructed in Columbia, and education facilities would need to be created in Springfield. The school also would require additional annual operating funding.

- **Translational Science: State Request - \$20 million**

A key mission of the University of Missouri System is to improve the health of Missourians, and this objective can be advanced by translating medical research into innovative health care products and services for the citizens of the State. This request will provide funds to maximize the translational science synergies between the two publicly funded medical schools within the state — the University of Missouri-Columbia and the University of Missouri-Kansas City. Specifically, these funds, to be split evenly between the two institutions, will enhance translational science collaboration through strategic infrastructure development (\$5M), recruitment of world-class faculty (\$4M), retention of the best and the brightest translational researchers (\$4M), development of centers of excellence (\$4M), and training for the next generation of translational scientists (\$3M). The funds will be used to support research programs that will benefit citizens in both rural and urban parts of the state and in ways that will take advantage of the unique strengths of both institutions, particularly with regard to the development and application of new treatments, drugs and medical devices.

- **Academic & Research Parity - \$15.6 million**

Current enrollment at the University of Missouri is over 73,000 students, up over 17,500 since 2001. This unprecedented enrollment growth over the last 12 years without additional funding from the state has resulted in increasingly larger class sizes and in higher student/faculty ratios than at our peer institutions. In addition, research productivity has stalled as our faculty attempt to respond to the growing numbers of students. To achieve academic and research parity with our peer institutions and maintain our reputation and status as one of the top land grant research universities requires additional state investment in the University of Missouri.

In 2008, the Council on Public Higher Education (COPHE) and the Coordinating Board for Higher Education adopted a funding formula which included an adjustment for enrollment growth from Fall 2000 to Fall 2006 for the University of Missouri and two other universities. This adjustment never occurred. The University of Missouri has continued to experience enrollment growth since the funding formula was adopted and the unfunded student enrollment now totals 17,535 for the period Fall 2000 through Fall 2011. Applying the COPHE methodology, which weights enrollment growth by student level and discipline, the additional required funding is \$32.2 million.

Fifty-two percent of this enrollment growth has been in the STEM areas and is discussed under the STEM funding request above. The remaining 48% or \$15.6 million is in non-STEM areas. As is true in the STEM disciplines, class sizes in the non-STEM disciplines have grown to a point where educational quality and faculty research productivity are at risk. The additional funding would provide the faculty, facility and staff needs to ensure that students have a quality educational experience, are retained to graduation, and complete degrees in a timely fashion. In addition, by hiring additional faculty, research productivity can be maintained and the University can maintain its competitive edge among the top public research universities. To ensure the continued delivery of quality education for all students attending the University of Missouri and to ensure that the University has the capacity to continue to deliver on its research mission, a funding adjustment that acknowledges the increase in service volume is necessary.

University of Missouri Health Care and Other Curator Programs

The Missouri Kidney Program, Missouri Telehealth Program, MOREnet, the State Historical Society of Missouri, Alzheimer's Research, Spinal Cord Injury, and Seminary Fund make up the Other Curator Programs.

These programs have had sizeable changes in appropriated amounts and receipts after withholdings over the past few years. As with our other operating appropriations our first goal in the FY2014 appropriation request is to maintain the FY2013 core appropriations. In addition, we will ask for slight increases which will be discussed for each program. Table 5 shows a summary of the requests and is followed by discussion of each component.

- **Request for University of Missouri Health Care - Missouri Rehabilitation Center Core of \$10.3 million and required cost increases of \$0.4 million**

The core appropriation for Missouri Rehabilitation Center of \$10.3 million is the only operating appropriation the University receives for health care operations. The FY2014 request will include continuing core appropriations for the Missouri Rehabilitation Center of \$10.3 million. An increase to the core of \$0.4 million will provide for a 3% merit increase for staff plus associated benefits and cover inflationary increases in benefits and other expenses. These increases are necessary to offset the growing burden of uncompensated care and ensure that the resources to provide health care services to the citizens of Missouri are available.

- **Requests for Other Curator Programs Core of \$3.3 million and required cost increases of \$2.8 million**

Requests for these programs include funds to support a 3% increase to the salary and wage pool and the associated benefits plus inflationary increases to benefits and other expenses incurred in providing services to the citizens of Missouri. The inflationary requests are summarized in Table 5. In addition, we will request a restoration of the core for the Missouri Kidney Program of \$1.4 million to restore the program to the FY2011 \$2.9 million appropriated amount.

MOREnet has requested an increase of \$573,279. This increase will ensure that all MOREnet members pay connectivity costs that are comparable to those in Missouri urban areas. Implementing these changes will help to create parity in rates throughout the state. Some rural or underdeveloped K-12 and higher education communities still lack affordable connectivity options compared to other communities in Missouri.

State Historical Society is requesting \$334,077 ongoing and \$120,000 onetime for 6 FTE (4 restored from past budget reductions plus 1 to locate at MSU research center and 1 to locate at SEMO research center); plus funding for additional digital storage, computer upgrades, microfilm, scanner, as well as furniture works stations for patrons.

Beginning in FY2012, the University of Missouri reduced the amount of annual funding for the Western Historical Manuscript Collection, administered and managed by the State Historical Society, from \$1.1 million to \$628,000; an additional annual reduction of \$100,000 goes into effect for FY2013 and years thereafter. These reductions resulted in the State Historical Society layoffs but research requests, acquisition and accessioning of historical materials, and public programming have not only continued apace, they have actually increased. The State Historical Society seeks to recover four of those ten positions, in an effort to better serve patrons, especially Missourians, who request its services.

Late in FY2012, in response to requests for access to its rich manuscript collections from students, faculty and other researchers at Missouri State University and Southeast Missouri State University, the State Historical Society began providing manuscripts by courier service to those institutions. The demand for this service prompts the State Historical Society to seek support from the General Assembly for the establishment of full-time manuscript specialist positions on each of those campuses, so that patrons can be better served in those regions of the state.

Requests in Accordance with Legislative Requirements: \$8.3 million

The University has certain requests that are made annually as one-time requests in accordance with legislative authority. See Table 6 for a summary.

- **Missouri Returning Heroes Act: State Request - \$2.0 million**

The University is requesting additional appropriations equivalent to tuition waived in FY2009 through FY2012 for the Missouri Returning Heroes Education Act. This act limits the amount of tuition charged to combat veterans who meet certain criteria but provides that institutions may request the tuition waived in the following year's appropriation request. Since the request was not funded in previous years, all four years are included. The amount of the request is estimated as \$2.0 million because the data for FY2012 will be gathered at the end of the fiscal year. Prior to the appropriation submission the number will be refined. Over 600 unduplicated students have benefited from this program.

- **Seminary Fund: State Request - \$4.3 million**

This program provides income for the general operation of University of Missouri College of Agriculture and School of Mines and Metallurgy. Per state statute, the Seminary monies belong to the University but the state must hold the securities. Annually a request must be made to the state for earnings from the monies to be distributed to the University. Requests must also be made for any reinvestment of the principal from maturing investments.

Approximately \$4.0 million of the appropriation we request provides for reinvestment of principal made by the University. The additional \$300,000 represents the interest earned on those investments and is used to fund the operations at MU Agriculture and MO S&T Mines & Metallurgy and to fund some scholarships.

- **Spinal Cord Injury Research Fund: State Request - \$1.5 million**

The Spinal Cord Injury Fund, established by the legislature in 2001, supports research in Missouri in the area of spinal cord injuries and congenital or acquired disease processes. State statute stipulates that the Board of Curators shall request annually an appropriation for research awards from the Spinal Cord Injury Fund. Research awards are a maximum of \$250,000 per award. The request is composed of appropriation for research funds and for administrative funds as provided by legislation.

- **Alzheimer's Research Fund: State Request - \$450,000 estimate**

Section 172.801, RSMo, stipulates that the Board of Curators shall request annually an appropriation for Alzheimer's research of not less than \$200,000 adjusted for inflation. In addition, the request is to include administrative costs not to exceed 10 percent of the appropriation for research. The \$450,000 amount is an estimate. June CPI numbers are needed to finalize our figures. Appropriations have not been provided for this program since FY2005.

Of the four requests only two, Missouri Returning Heroes and Alzheimer's Research are funded from state general revenue. The others have special fund sources that cannot be used for any other purpose.